through it. Here the organization of the whole seems to have disappeared; nevertheless, this porridge-like mass presently becomes reorganized in the form of the living butterfly.

(6) A sponge (Clathrina) consisting of specialized cells of at least four different kinds and forming two definite membranes, inner and outer, and a skeleton which gives the whole organism a shape as definite and specific as that of the mushroom, may be mechanically broken into fragments, the cells becoming detached from one another. A small group of separated cells of the several kinds may then be observed to come together in small clumps. ' This higgledy-piggledy of cells joined at random is able to reorganize itself, to produce order out of chaos.[5] Gradually they sort themselves out and arrange themselves in the two main layers normal to the sponge, and then proceed collectively to constitute a sponge with all the characters proper to its species.[c] The random collection of cells (through processes not seen in normal development) has become an actual sponge, living and functioning, similar in every way to one that has grown up from the egg ' (J. S. Huxley).

Again, if the group of the most specialized of these cells, the flagellate collar-cells, which normally live in the channels of the sponge, be separated from the rest, they will come together in a spherical mass, turning their collars in the outward direction, then collectively form a hollow sphere, like a Volvox, and proceed to live as a single organism. It is especially noteworthy that, in the

normal life of the sponge, these collar-cells are dislodged from time to time at every contraction of the whole sponge, and forced into clumps; when the sponge re-expands they reassume their positions in the single layer lining the